

## **Abstract**

An apparatus and method for processing documents is provided. Preferably the apparatus includes a plurality of document processing features operable for processing a variety of documents, such as incoming mail. The apparatus may include a feeder for feeding the documents from a sack of documents, an extraction station for extracting documents from envelopes, an optical scanner for scanning optical images of the documents, a orientation detection station for determining the orientation of the documents, a MICR station for identifying unknown magnetic ink markings and a sorting station for sorting the documents. The documents include a document having an unknown magnetic marking that is magnetized and then scanned to obtain a plurality of data points indicative of the unknown marking. Using cross correlation, the data for the unknown marking is then compared with a series of models corresponding to a series of known magnetic markings. The unknown marking is determined to be the marking corresponding to the model that most closely correlates to the unknown marking.